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December 2, 2002

Docket Control Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007

Re: Mesquite Power, LLC - CEC Decision No. 63232

Docket No. L-00000S-00-0101

Arizona Corporation Commission DOCKETED

DEC 03 2002

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Docket Control:

The Arizona Corporation Commission, on recommendation by the Line Siting Committee, approved a Certificate of Environmental Compatibility for the construction of the Mesquite Generating Station, a nominal 1,000 megawatt (MW) natural gas fired, combined cycle power plant. Stipulation 12 of the Certificate of Environmental Compatibility required Mesquite Power, LLC to submit an annual report outlining the implementation status of Comprehensive Land Management Plan ("the Plan") that was included with the application for this Certificate.

Attached are twelve copies of the Annual Report for the 2002. A copy of the letter without the attached report has been forwarded to the Director, Utilities Division for information.

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

Marty C. Swartz

Manager, Project Development

Mcs:accstaffltr03/enclosure

cc: Ernest Johnson, Director, Utilities Division, w/0 enclosure

C. Sterling, w/1 enclosure

L. Robertson Esq., Munger Chadwick w/1 enclosure

C. Consoli Esq., Byran Cave w/1 enclosure

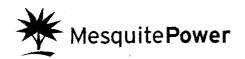
M. Gallagher, Mesquite Power w/1 enclosure

M. Karpiscak, University of Arizona w/1 enclosure

C. Shuler, C. F. Shuler, Inc. w/1 enclosure

M. Swartz, w/1 enclosure

File





Comprehensive Land Management Plan Annual Status Report Mesquite Power Project

Submitted to

Arizona Corporation Commission

by

Mesquite Power, LLC

November 2002

Executive Summary

The Arizona Corporation Commission, on recommendation by the Line Siting Committee, approved a Certificate of Environmental Compatibility for the construction of the Mesquite Generating Station, a nominal 1,000-megawatt (MW) natural gas fired, combined cycle power plant. Stipulation 12 of the Certificate of Environmental Compatibility required Mesquite Power, LLC to submit an annual report outlining the implementation status of Comprehensive Land Management Plan ("the Plan") that was included with the application for this Certificate.

All portions of the 400 acre site that required clearing for the plant construction have been cleared including the 80 acre parcel on the east side of the railroad spur. The three areas of the plant site that were identified as preserved areas have remained undisturbed during construction and will remain undisturbed during operations. These three areas have significant mesquite bosque and are valuable to both wildlife and as a visual screening. In addition, an area south of the west evaporation pond did not have to be cleared and has remained undisturbed. Mesquite Power, LLC will attempted to maintained this area in its natural state for the remainder of the construction period.

In order to restore the 80-acre parcel east of the rail spur to a natural desert landscape following construction, approximately 25,000 cacti were salvaged from this property and transplanted in the temporary nursery. These cacti will be returned to the 80-acre parcel following the completion of construction.

Further study and review of the water property resulted in a revision of the amount of acres in each of these categories that was described in detail in the November 2001 Status Report. There have been no significant changes to these classifications and the estimated acreage for each category.

Mesquite Power, LLC identified two activities for interim land management fencing and controlling tumbleweeds. The cutting of the tumbleweeds prior to going to seed and the limited rainfall last during the year has significantly reduced the tumbleweeds such that no further actions are required. Installation of the new barbed wire fencing around the entire parameter of the water property was completed and grazing of any cattle on the water property has been eliminated. In addition, Mesquite Power, LLC has cleaned the site of the debris and trash left by the previous owners of the property and existing wells that were not in use have had the pumps and motors removed and capped.

In March, approximately 50 acre of retired cropland was hand-planted with a mixture of 15 species of native shrubs, forbs, and grasses using rose pot transplants. A seed mixture of 12 native species was also planted by hand. The entire field is drip irrigated using a system designed after vegetable production in the Yuma area. Planting rates for transplants are 200 plants per acre, or double the vegetation density found on adjacent undisturbed areas. Initial planting survival was estimated on May 30, 2002. No data is given for the seeded portion of the field as no seed germination was observed at that time. Note that the low initial survival of Ambrosia dumosa, Baileya multiradiata, and Sphaeralcea ambigua may be due in part to a very late frost the night before planting.

As was noted in the last status report issued in November 2001, the schedule was revised to perform plantings, including the test plot in the spring instead of the fall as original program had indicated. This change in the planting schedule was based on damaged to plants from rabbits and other wildlife on the Duke Arlington Valley site during fall plantings.

The re-vegetation program will focus on re-vegetating the areas with the list vegetation and included Sections 24 and 13 in Range 7 west and Sections 18 and 19 in Range 6 west. These areas have been identified as Areas 1,2, 3 and 4. Mesquite Power, LLC will re-vegetate between 200 and 265 acres of Area 1 in late February or early March 2003. The remaining portions of Area 1 will be re-vegetated in early 2004.

The same methods will be employed (drip irrigation, hand planting, rose pot transplants) as used in the test plot. No seed, however, will be used in this planting. Plans for this spring's upcoming planting calls for double the desired plant density to accounted for the higher mortality that is found with the rose pots compared to one-gallon transplants that were used for the Duke Arlington Valley re-vegetation program. Plants for this re-vegetation effort were ordered during the summer. The irrigation system materials have been ordered and installation will begin in December 2002. The piping system is being set-up to be used for Areas 1, 2, 3, and 4 so that significant irrigation work is not required in the future.

Mesquite Power, LLC has established three conservation easements totaling an area of 42 acres. These areas were designated after consultation with US fish and Wildlife, US EPA and Arizona Game and Fish. Mesquite Power, LLC is currently reviewing potential candidates to act as the conservator of these conservation easements since Arizona Game and Fish has decided not to accept the conservator role. Mesquite Power, LLC is continuing to work with Arizona Game and Fish, Ducks Unlimited, Southwest Rehabilitation and other interested parties to develop alternative lands uses.

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Comprehensive Land Management Plan

1.0 Introduction

The Arizona Corporation Commission, on recommendation by the Line Siting Committee, approved a Certificate of Environmental Compatibility for the construction of the Mesquite Generating Station, a nominal 1,000-megawatt (MW) natural gas fired, combined cycle power plant. Stipulation 12 of the Certificate of Environmental Compatibility required Mesquite Power, LLC to submit an annual report outlining the implementation status of Comprehensive Land Management Plan ("the Plan") that was included with the application for this Certificate.

The following is an update on the implementation of the Plan for the 400-acre plant site and the approximately 2,990 acres of water property located approximately 2-1/2 miles west of the power plant site. This report will be address the implementation status, water use status and schedule status the plant site and the water property as of November 2002.

2.0 Project Site Management Plans

2.1 Site Description

Construction of the facility began in September 2001 with clearing of the plant site. The buffer zones around the facility as described in section 2.1 of the Plan remain the same except for the 80-acre parcel east of the railroad spur that runs along the centerline of Section 15. The Plan indicated that this land would remain undisturbed construction of the facility. This Section of land is required as laydown and storage area during construction of the facility. However, the use of this area is not required for operations and will be restored to its natural state and remain unused after completion of the construction phase of the project. The land management for this area will be discussed in Section 2.2 of this report.

2.2 Land Management – Plant Site

All portions of the 400 acre site that required clearing for the plant construction have been cleared including the 80 acre parcel on the east side of the railroad spur. Aerial photograph of the site as October 2002 is provided in Attachment A.

The three areas of the plant site that were identified as preserved, have remained undisturbed during construction and will remain undisturbed during operations. These three areas have significant mesquite bosque and are valuable to both wildlife and as a visual screening. These three areas are identified on the aerial photographs provided in Attachment A. These areas have been fenced with orange snow fencing to provide additional protection. In addition, an area south of the west evaporation pond did not have to be cleared and has remained undisturbed. Mesquite Power, LLC will attempted to maintained this area in its natural state for the remainder of the construction period.

The off site nursery that contains the mesquite trees and cacti salvaged form the plant is being managed and maintained by Arizona's Best, a professional plant salvaging and nursery company. The survival rate of the Mesquite trees has been excellent and no trees have been lost. The survival rate of the cacti has been fair because of the drought and the summer salvaging. 30% of the salvaged cacti have been lost but the salvage company will replace those lost. Photographs of the temporary off-site nursery are provided in Attachment B.

As indicated in Section 2.1 above, the 80-acre parcel east of the rail spur will be used for laydown and storage during construction. In order to restore the 80-acre parcel to a natural desert landscape following construction, approximately 25,000 cacti were salvaged from this property and transplanted in the temporary nursery. These cacti will be returned to the 80-acre parcel following the completion of construction.

The landscape architect is currently developing the final landscaping plan for the plant site. This plan will be provided in the 2003 status report. The main piping header for the irrigation system and the 120 VAC power wiring will be installed during construction with the piping system branch lines, control valves, sprinklers and control boxes installed during the landscaping operations.

2.3 Water Use – Plant Site

Estimated water usage is unchanged from the Plan. The re-vegetation of the 80-acre parcel will be done with salvaged cacti and hydro seeding with natural vegetation that will require no additional water.

2.4 Schedule - Plant Site

The construction of the plant is proceeding slightly ahead of schedule with the estimated commercial operation date of the first power block (first 500 MW) being June 2003 and the second block being November 2003. Landscaping of the 80-acre parcel on the east side of the rail spur will commence upon completion of the first block. The remainder of the landscaping will be installed after commercial operation of the second block.

3.0 Water Property Management Plans

3.1 Water Property Description

The 3,000 acres of water property was classified into the following six categories with a brief description of each provided. Further study and review of the water property resulted in a revision of the amount of acres in each of these categories that was described in detail in the November 2001 Status Report. There have been no significant changes to these classifications and the estimated acreage for each category is presented below. An aerial photograph of the water property with the areas for each category highlighted is provided in Attachment C. (Note that the aerial photograph does not show the entire property. The property extends to the south approximately ½ mile south of Centennial Wash. None of this property requires re-vegetation. There is an approximate 140-acre parcel east of the property that may require some re-vegetation based on how the natural re-vegetation proceeds.)

Fallow Farmland

Approximately 2,117 acres of the water property is retired or fallow farmland and will be fully re-vegetated.

Retired Farmland with Partial Vegetation

Approximately 266 acres of the water property is retired farmland that has been out of production for an extended period of time and, as a result, desert vegetation has been partially re-established in these areas.

Retired Farmland Not Requiring Re-vegetation

There are about 299 acres of the water property that were previously farmed, but has been naturally re-vegetated.

Natural Desert Areas (No re-vegetation required)

There are an additional 287 acres of the water property that will not require revegetation because they are generally in their natural vegetative state.

Perimeter Roads

Approximately 12 to 14 acres of roads to access the property.

3.2 Land Management – Water Property

3.2.1 Interim Land Management

Mesquite Power, LLC identified two activities for interim land management fencing and controlling tumbleweeds. The cutting of the tumbleweeds prior to going to seed and the limited rainfall last during the year has significantly reduced the tumbleweeds such that no further actions are required. The evidence of tumbleweeds will be monitored to ensure that the problem does not resurface prior to re-vegetation of those particular areas of the water property. Installation of the new barbed wire fencing around the entire parameter of the water property was completed and grazing of any cattle on the water property has been eliminated. All fencing on the water property meets the animal protection requirements of Arizona Game and Fish.

In addition to these two activities, Mesquite also determined that the property needed to be cleared of all trash and debris. Mesquite Power, LLC has cleaned the site of the debris and trash left by the previous owners of the property. Existing wells that were not in use have had the pumps and motors removed and capped. Mesquite will also be requesting Arizona Public Service to remove all existing power poles, distribution lines and transformers no longer required as a result of these wells being capped.

3.2.2 Vegetation Management Approach

A recent inventory of undisturbed desert lands to the east and west of the site was conducted by the University of Arizona to provide an estimate of local native vegetation parameters. Vegetative density on these areas was estimated at 102 plants per acre (252 plants per hectare) and vegetative cover was estimated at 4% using line transects and the nearest individual distance method as described by Barbour *et al.* (1998). Average plant spacing was estimated at 21 feet (6 meters) from any random point to the nearest individual plant. The most abundant species on the adjacent undisturbed lands is creosote bush, which comprises about 60% of all plants on the inventoried areas. White bursage (*Ambrosia dumosa*) is the second most abundant species, comprising 25% of all plants on the inventoried areas. Other important species occurring on the adjacent lands include velvet mesquite (*Prosopis velutina*), wolfberry (*Lycium exsertum*), desert saltbush (*Atriplex polycarpa*), diamond cholla (*Opuntia ramossissima*), catclaw acacia (*Acacia greggii*), white ratany (*Krameria grayii*), big galleta (*Hilaria rigida*), and fluffgrass (*Erioneuron pulchellum*), among others. Plant species were identified according to Kearny and Peebles (1960).

Unfortunately, some of the native species found in the inventory are not commercially available. Of those that are, many are not readily available in sufficient quantities for a project of this scale. None of the available plant materials (seed and seedlings) are source-identified. It is believed by some researchers that the most desirable plant materials for use in restoration projects are those from the primary restoration gene pools (Booth & Jones 2001) of the local native plant species. These would be plants grown from locally collected seed, representing plants that are genetically identical to the populations of interest as a result of proximity and genetic connectivity. A compromise was made in the selection of the plant materials so that the appropriate locally adapted native species could be used, even though the exact origins of the materials were unknown. These materials are representative of the secondary restoration gene pool, as they come from sites geographically isolated from the target population but are theoretically still adapted to the target site.

A combination of transplanting containerized seedlings and seeding will be utilized in the re-vegetation program. It should be noted that a consideration with direct seeding herbs, forbs, trees and shrubs is that seedlings started from seed are slow to start and can be at a severe disadvantage compared to containerized plants as well as weeds. Transplanting containerized seedlings and applying establishment irrigation is the most reliable method of establishing plants, but it is also the most expensive. Mesquite's revegetation plan will rely as much as practical on the use of transplanting containerized seedlings in order to increase the likelihood of success of the re-vegetation plan. However direct seeding methods will also be employed, as noted.

Once plants are transplanted or seeded, irrigation will be needed to keep the surface of the soil moist until seeds are germinated and seedlings are established. Plants are unlikely to persist on level surfaces where rainfall does not penetrate into the soil and when containerized transplants are used, it is vital that the soil be kept moist until roots grow from the small root ball into the surrounding soil.

3.2.3 Re-vegetation Test Plot

On March 6, 2002, approximately 50 acre of retired cropland was hand-planted with a mixture of 15 species of native shrubs, forbs, and grasses using rose pot transplants. Rose pots transplants, measuring 2 x 2 x 3 in, are commonly sold by wholesale nurseries to retail nurseries, where they are planted into larger size containers and sold to the consumer after a short period of growth. A seed mixture of 12 native species was also planted by hand. A list of the species planted and quantities of each species is provided in Attachment D. The entire field is drip irrigated using a system designed after vegetable production in the Yuma area. Planting rates for transplants are 200 plants per acre, or double the vegetation density found on adjacent undisturbed areas. Transplants were planted in pairs at each drip emitter. We selected to randomly pair transplants to evaluate the possible benefit of mutualism or commensalism. Seed was applied at a rate of 15 lbs per acre to selected areas (a 2 ft radius around each drip emitter) within a portion of the field. The Seed was applied in known amounts and proportions to selected emitters, and this should allow us to estimate germination and establishment rates by species. With this information, we will be able to predict the expected species composition of a given seed mix applied under similar field conditions. Attachment D contains a list of grams of seed for each species applied in the test plot.

Initial planting survival was estimated on May 30, 2002. The results are provided in the tables provided in Attachment E. No data is given for the seeded portion of the field as no seed germination was observed at that time. Note that the low initial survival of *Ambrosia dumosa, Baileya multiradiata,* and *Sphaeralcea ambigua* may be due in part to a very late frost the night before planting. Plants were delivered the day prior to planting and were on-site overnight, when temperatures reached 29 °F. Photographs of the test plot area are provided in Attachment F.

3.3 Water Use – Water Property

Water usage during the re-vegetation program is essentially unchanged. The reduction in the total acreage of fallow farmland should result in a slight reduction in overall water usage.

3.4 Schedule – Water Property

As was noted in the last status report issued in November 2001, the schedule was revised to perform plantings, including the test plot in the spring instead of the fall as original program had indicated. This change in the planting schedule was based on damaged to plants from rabbits and other wildlife on the Duke Arlington Valley site during fall plantings.

The re-vegetation program will focus on re-vegetating the areas with the list vegetation and included Sections 24 and 13 in Range 7 west and Sections 18 and 19 in Range 6 west. These areas have been identified as Areas 1,2, 3 and 4. An aerial photograph designating these areas and a close-up photograph of each area is provided in Attachment G. Mesquite Power, LLC will re-vegetate between 200 and 265 acres of Area 1 in late February or early March 2003. The remaining portions of Area 1 will be re-vegetated in early 2004.

The same methods will be employed (drip irrigation, hand planting, rose pot transplants) as used in the test plot. No seed, however, will be used in this planting. Establishment data from the first planting are being used to help adjust rates and composition of future seeding mixes and we hope to incorporate selective seeding into a future planting. Plans for this spring's upcoming planting calls for double the desired plant density to accounted for the higher mortality that is found with the rose pots compared to one-gallon transplants that were used for the Duke Arlington Valley re-vegetation program.

Plants for this re-vegetation effort were ordered during the summer with a list of the plants and quantities provided in Attachment H. The irrigation system materials have been ordered and installation will begin in December 2002. The piping system is being set-up to be used for Areas 1, 2, 3, and 4 so that significant irrigation work is not required in the future. The drip irrigation system for the 2003 planting will be installed have the main system is completed. A sketch of the system is provided in Attachment I.

4.0 Alternative Land Uses

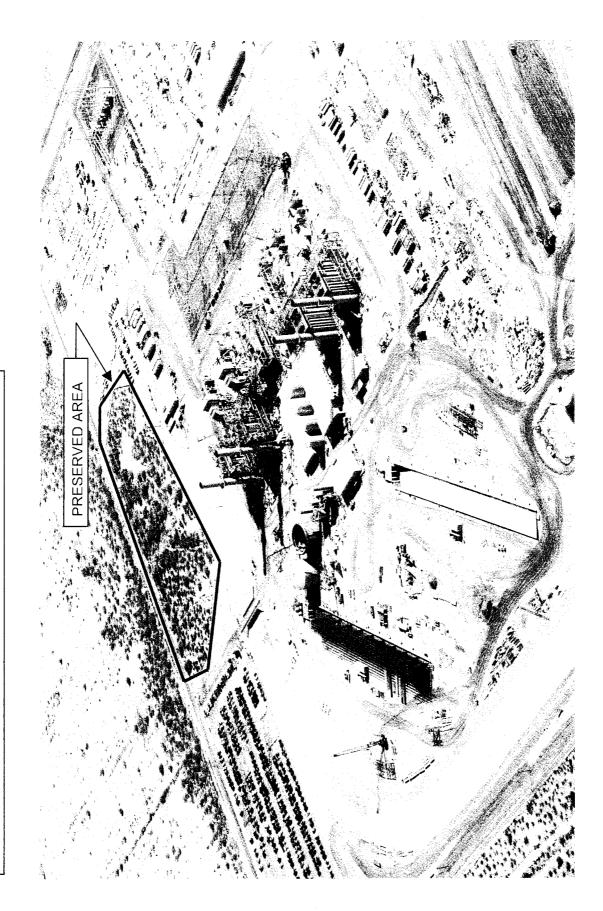
Mesquite Power, LLC is continuing to develop other land use alternatives for the Water Property in an attempt to provide unique environmental or educational opportunities while maintaining an open space type land designation. Mesquite Power, LLC is continuing to work with Arizona Game and Fish, Ducks Unlimited, Southwest Rehabilitation and other interested parties to develop alternative lands uses.

Mesquite Power, LLC has established three conservation easements totaling an area of 42 acres. These areas were designated after consultation with US fish and Wildlife, US EPA and Arizona Game and Fish. Mesquite Power, LLC is currently reviewing potential candidates to act as the conservator of these conservation easements since Arizona Game and Fish has decided not to accept the conservator role.

ATTACHMENT A Plant Site Aerial Photograph

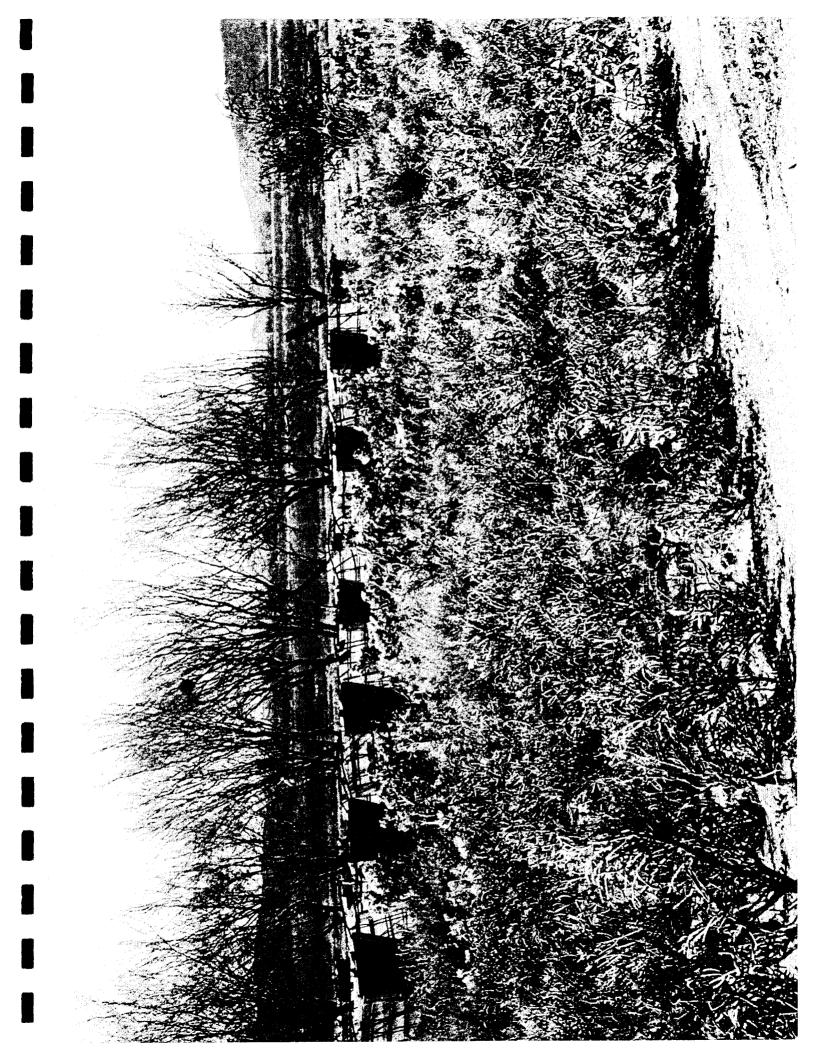
PLANT SITE - AERIAL PHOTOGRAPH

PRESERVED AREAS SOUTHERN PORTION OF SITE



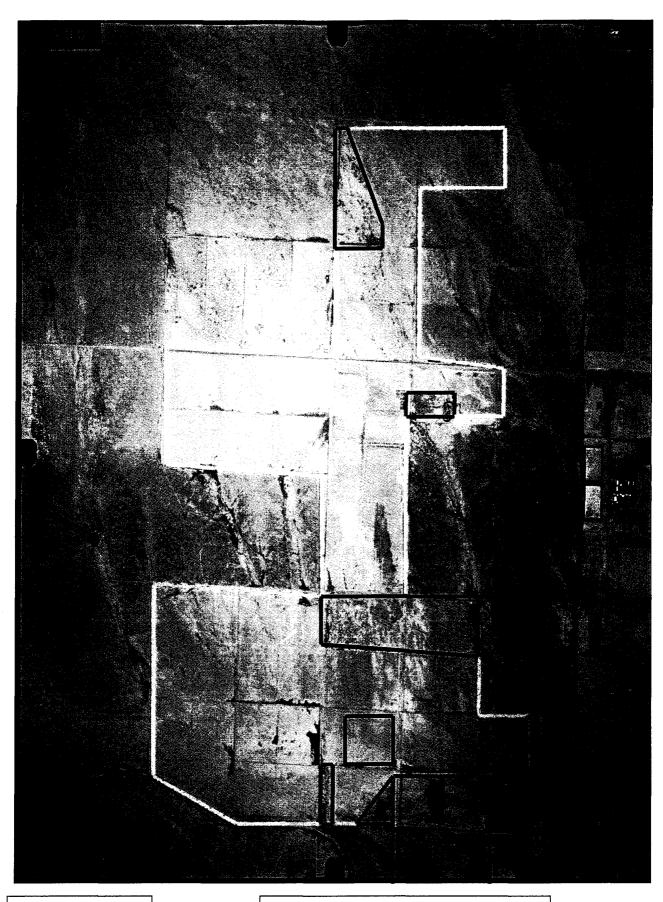
PRESERVED AREAS NORTHERN PORTION OF SITE

ATTACHMENT B
Temporary Nursery - Photographs



ATTACHMENT C Water Property Land Assessment

WATER PROPERTY LAND ASSESSMENT



50 AC TEST PLOT

LAND NOT REQUIRING RE-VEGETATION

PARTIAL RE-VEGETATION

ATTACHMENT D Test Plot – Plant Species

Plant Species and Seeding - March 2002 50 Acre Test Plot

Species	Transplants: number	Seed: grams seeded	
	planted		
Acacia greggii	611	151	
Ambrosia dumosa	611	234	
Aristida purpurea	917	378	
Atriplex canescens	611	272	
Atriplex lentiformis	611	224	
Atriplex polycarpa	611	237	
Baileya multiradiata	917	350	
Cassia Covesii	917	316	
Cercidium microphyllum	611	148	
Hilaria rigida	917	Not seeded	
Larrea tridentata	611	224	
Lycium exsertum	611	Not seeded	
Muhlenbergia Porteri	917	Not seeded	
Prosopis velutina	611	154	
Sphaeralcea ambigua	917	409	
TOTAL	11,000	3,097	

ATTACHMENT E Test Plot – Plant Survival Rates

THREE-MONTH SURVIVAL OF SPECIES PLANTED - 2002 TEST PLOT

		Standard	Lower 95%	Upper 95%
Species	Mean survival	error	CI	CI
Acacia greggii	83.7	5.3	72.9	94.4
Ambrosia dumosa	7.9	4.4	-1.1	16.9
Aristida purpurea	57.1	6.3	44.6	69.7
Atriplex canescens	83.7	5.7	72.2	95.2
Atriplex lentiformis	87.9	4.3	79.3	96.6
Atriplex polycarpa	81.4	6.0	69.3	93.5
Baileya multiradiata	18.8	7.0	4.5	33.0
Cassia covesii	11.4	4.8	1.6	21.1
Larrea tridentata	11.4	5.5	0.3	22.5
Lycium exsertum	58.0	7.1	43.8	72.2
Muhlenbergia porteri	82.4	4.7	73.1	91.6
Parkinsonia				
microphylla	5.3	3.7	-2.2	12.7
Pleuraphis rigida	87.0	4.6	77.8	96.3
Prosopis velutina	92.3	4.3	83.6	101.1
Sphaeralcea ambigua	28.8	5.9	16.9	40.7
TOTAL	56.5	1.8	52.9	60.2

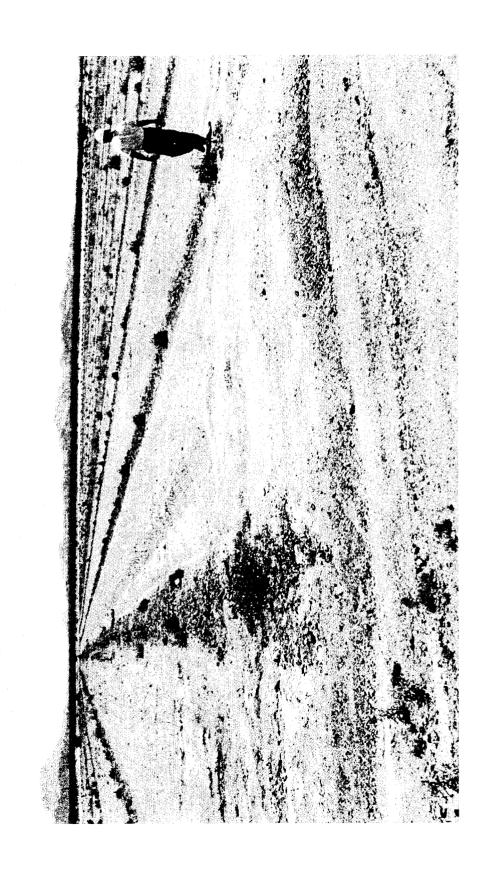
CI =95% confidence interval for the mean and is a range of values which contains the population mean with a 95% probability.

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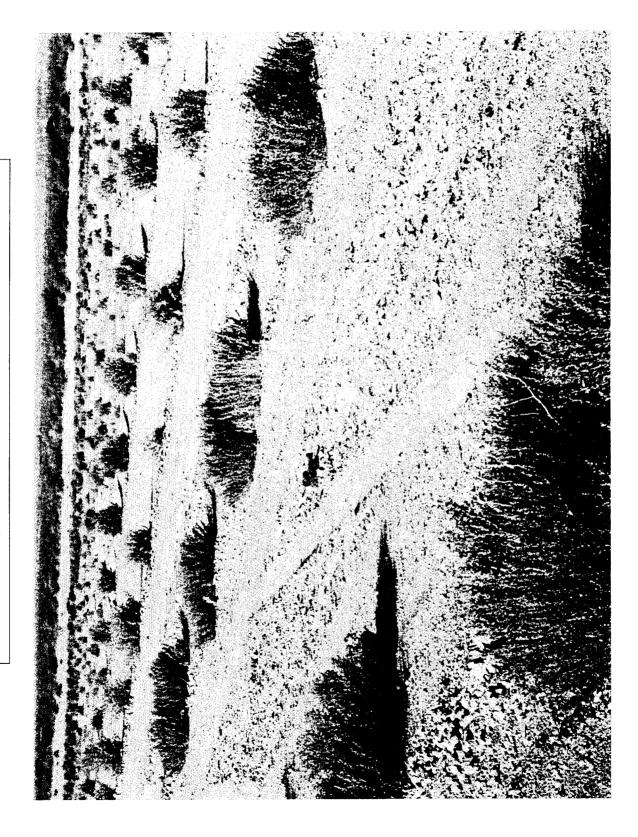
Three-month survival of species planted at Mesquite Power in March 2002

ATTACHMENT F Test Plot – Photographs

50 ACRE TEST PLOT - MAY 2002

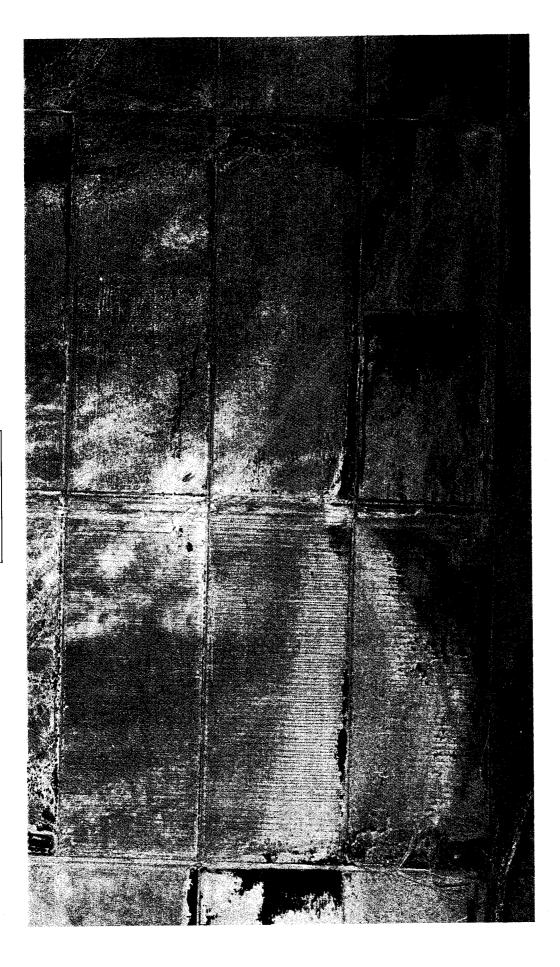


50 ACRE TEST PLOT - JULY 2002

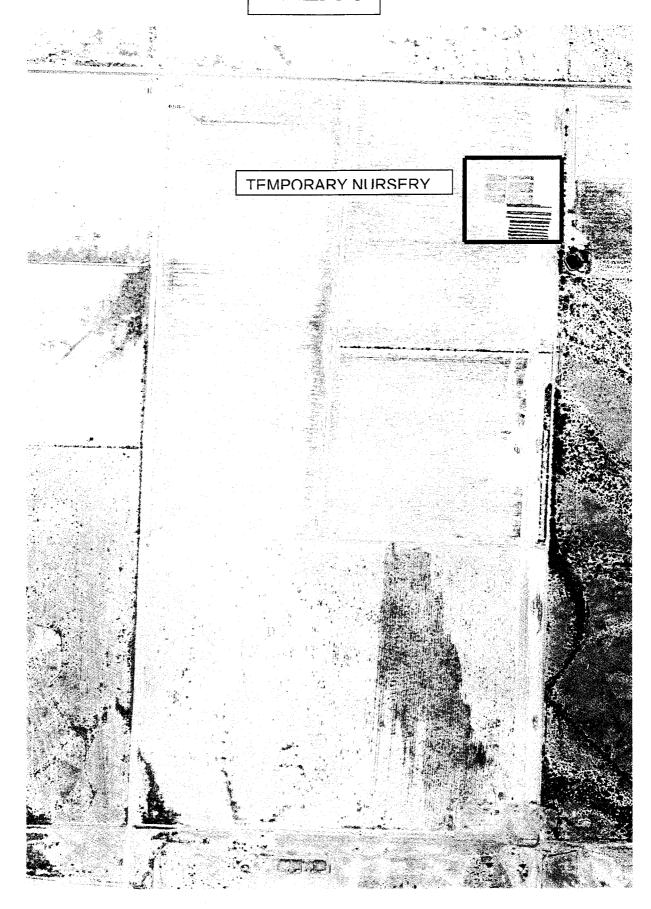


ATTACHMENT G Water Property – Re-vegetation Areas





AREA 3





ATTACHMENT H 2003 Re-vegetation Species List

Re-Vegetation 2003 Plant Order

Species	Number of Plants		
Acacia greggii	3,259		
Ambrosia dumosa	7,810		
Aristida purpurea	1,630		
Atriplex canescens	3,259		
Atriplex lentiformis	1,630		
Atriplex polycarpa	6,444		
Baileya multradiata	1,630		
Cassia covesii	1,630		
Cercidium microphyllum	3,259		
Hilaria rigida	1,630		
Larrea tridentate	8,561		
Lycium exsertum	3,259		
Muhlenbergia porteri	1,630		
Prosopis velutina	3,259		
Sphaeralcea ambigua	1,630		
Total:	50,520		

ATTACHMENT I Irrigation System

